

# [Parts of the brain – fuctions](https://assignbuster.com/parts-of-the-brain-fuctions/)

Medullaa structure in the hindbrain involved in regulating basic life functions, such as heartbeat and respirationBrainstemthe " stalk" in the lower part of the brain that connects the spinal cord to higher regions of the brain ONPARTS OF THE BRAIN – FUCTIONS SPECIFICALLY FOR YOUFOR ONLY$13. 90/PAGEOrder NowCerebral Cortexthe wrinkled, outer layer of gray matter that covers the cerebral hemispheres; controls higher mental functions, such as thought, language, learning, memory, emotions and control of voluntary movementThalamusa structure in the forebrain that serves as a relay station for sorting and integrating sensory information and that plays a key role in regulating states of wakefulness and sleepCorpus Callosumthe thick bundle of nerve fibers that connects the two cerebral hemispheresHypothalamusa small, pea sized structure in the forebrain that helps regulate many vital bodily functions, including body temperature and reproduction, as well as emotional states, aggression, and responses to stressMidbrainthe part of the brain that lies on top of the hindbrain and below the forebrain; contains nerve pathways that connect the hindbrain and forebrain and control automatic movements of eye musclesPonsa structure in the hindbrain involved in regulating states of wakefulness and sleep and in conveying sensory information from the spinal cord to the forebrainHippocampusa structure in the limbic system involved in memory formationPituitary Glandsmall endocrine gland in the brain that produces the hormone melatonin; involved in regulating sleep-wake cycleSpinal Cordthe column of nerves that transmits information between the brain and the peripheral nervous systemCerebelluma structure in the hindbrain involved in controlling coordination and balanceFrontal Lobethe parts of the cerebral cortex, located at the front of the cerebral hemispheres, that are considered the " executive center" of the brain because of their role in higher mental functions; control motor responses and higher mental functions, such as thinking, planning, problem solving, decision making, and accessing and acting on stored memoriesParietal Lobethe parts of the cerebral cortex, located on the side of each cerebral hemisphere, that process bodily sensations relating to touch, pressure, temperature, pain and body movementOccipital Lobethe parts of the cerebral cortex, located at the back of both cerebral hemispheres, which process visual stimuli and information, giving rise to sensations of visionTemporal Lobethe parts of the cerebral cortex lying beneath and somewhat behind the frontal loves that are involved with processing audio stimuli and information, giving rise to the sensations of soundBroca's Areaan area of the left frontal love involved in speechWernicke's Areaan area of the left temporal lobe involved in processing written and spoken languageAxonthe tubelike part of a neuron that carries messages away from the cell body towards other neuronsDendritestreelike structures in the neuron that receive neural impulses from neighboring neuronsSomathe cell body of a neuron that contains the nucleus of the cell and carries out the cell's metabolic functionsTerminal Buttonsswellings at the tips of axons from which neurotransmitters are dispatched into the synapseNodes of Ranviergaps in the myelin sheath that create non-insulated areas along the axonMyelin Sheatha layer of protective insulation that covers the axons of certain neurons and helps speed transmission of nerve impulses